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RESEARCH AND DEVELOPMENT

Monthly Progress Reports

Strictly Confidential

MARCH 1980

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PME RESEARCH LABORATORY, MARCH 1980

PROJECT TITLE : PRODUCT RESEARCH

PERIOD COVERED : FEBRUARY 25 - MARCH 28, 1980

WRITTEN BY : P. GHISTE

NO AND CO IN MAINSTREAM (MS) AND SIDESTREAM (SS) SMOKE

- Assistance was given to TLA (1). CO in MS and SS of some RCB/US and RCB/CH cigarettes was determined.

	CO in MS smoke		CO in SS smoke	
	mg/g tobacco	% Reduction	mg/g tobacco	% Reduction
100 % RCB/US, lot 9997	19.2		79.3	
100 % RCB/CH, lot 0112	15.8	17 %	72.8	8 %
50 % RCB/US, lot 117 A + 50 % MLF blend	22.2		81.7	
50 % RCB/CH, lot 117 B + 50 % MLF blend	16.6	25 %	75.8	7 %

The findings (2) (3) that CO delivery by cigarettes containing Swiss RCB material is lower than by RCB/US cigarettes could thus be confirmed for MS smoke and also shown for SS smoke.

REFERENCES

(1) Memo of L. Joseph to P. Ghiste, February 27, 1980

(2) P. Ghiste, PME Research Laboratory, Monthly Progress Report, July 1979

(3) L. Joseph, PME Research Laboratory, Monthly Progress Report, October 1979

P. Ghiste

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PME RESEARCH LABORATORY, MARCH 1980

PROJECT TITLE : PRODUCT RESEARCH

PERIOD COVERED : FEBRUARY 25 - MARCH 28, 1980

WRITTEN BY : J. BOURQUIN

INSTRUMENTATION DEVELOPMENT

- Battelle type smoke pumps:

  The power supply circuit for the DC motor has been designed and is presently being tested. Basically it consists of a typical feedback loop. A speed measuring device (tachogenerator) gives an output voltage which is proportional to the motor's speed. The voltage is compared with a reference and the difference (or error) signal, after proper conditioning (PID regulator), controls the output level of the voltage regulator feeding the motor. Thus, any change in motor speed causes a counteracting change in the supply voltage. As the gain of the open loop is high, the regulation is tight.

- NO-Analyzer for QC:

  The HP-9810A calculator was installed. A programme has been written for NO data acquisition and computation.

J. Bourquin

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PME RESEARCH LABORATORY, MARCH 1980

PROJECT TITLE	:	ANALYTICAL INVESTIGATIONS
PERIOD COVERED	:	FEBRUARY 25 - MARCH 28, 1980
WRITTEN BY	:	F. MOSER

ANALYSIS OF METALS IN NINO EXTRACTS BY ATOMIC ABSORPTION

Nino extracts contain phosphoric acid and phosphates in high and varying concentrations. The accurate determination of major cations in Nino extracts, potassium, calcium and magnesium by atomic absorption is strongly impeded by the presence of phosphoric acid, even when lanthanum is added which should eliminate the interference. This prompted us to develop a clean-up procedure for Nino extracts before analyzing the metals by atomic absorption.

Clean-up Procedure:

The Nino extract sample (100 mg) is passed through a column containing AMBERLITE IR-120 (or DOWEX 50) cation exchange resin in the H^+ form. The resin is washed with three portions of 10 ml of distilled water until the pH of the effluent is neutral. The cations are eluted with 50 ml of 4 N HCl. The column is then ready for a new adsorption cycle after rinsing with distilled water to eliminate the concentrated acid. By this procedure, which is to some extent similar to the method described by Denson (1), all anions and all organic substances are eliminated from the sample before analysis by atomic absorption.

Service for other groups

15 tobacco lots (TLA) were analyzed for ISH.

REFERENCE

(1) Denson, J.R., J. Biol. Chem., 209, 233 (1954).

F. Moser

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PME RESEARCH LABORATORY, MARCH 1980

PROJECT TITLE	:	ANALYTICAL INVESTIGATIONS
PERIOD COVERED	:	FEBRUARY 25 - MARCH 28, 1980
WRITTEN BY	:	E. LECOULTRE AND M. HOFER

TRIACETIN ESTROBOND B

Two five-liter samples of triacetin BAYER containing 0.8 % and 1.9 % of the ESTROBOND B additive glycerol-propionate-diacetate (isomer mixture) were prepared and sent to the Product Development for cigarette preparation and panel testing (1).

CF ANALYSIS

- At the request of the Product Development, five commercial flavours were checked for CF by capillary gas chromatography and by GC/MS (SIM-mode).
  CF could not be detected (2).

- At the request of QC, CF was analyzed by GC in Camel Mild (France) (CF found 43.9 µ/g tobacco) and in Camel Lights (Germany) (no CF found) (3). Results were confirmed by GC/MS.

SLIMACIDE

In view of the use of standard LTR sheet in the United Kingdom, information on the Slimacide residue on LTR was requested (4). LTR samples were checked for Slimacide-V10 (1,4-bis-bromacetoxy-butene-2; controls bacterial and/or fungal slime in pulp and paper mills).

Slimacide was analyzed by HPLC (column: Waters µ-Bondapack C18; solvent: methanol/water 1:1; flow: 2 ml/min) after extraction of the LTR sheet with tetrahydrofurane. The detection limit is 50 ppm. Slimacide which is added into the pulper at 300 ppm based on sheet solids, could not be detected (5).

AMINO ACIDS

- Amount and composition of amino acids in two probes of lyophilized smoke condensate submitted by PM Richmond (6) were determined. As the amino acid concentrations found are close to the detection limit, the determinations will have to be repeated.

- Amino acids were analyzed after protein hydrolysis in 60 protein samples submitted by Product Research.

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MISCELLANEOUS

Phosphate (120 analyses) sulfate (120 analyses), calcium, potassium and magnesium (30 analyses), alcohols (30 analyses) were determined in various samples for Biotechnology and Process Development.

REFERENCES

(1) Memo of E. Lecoultre to U. Nyffeler, March 21, 1980

(2) E. Lecoultre, Notebook

(3) Memo of W. Fink to M. Häusermann, March 5, 1980

(4) Memo of H. Gaisch to W. Fink, January 29, 1980

(5) Memo of W. Fink to H. Gaisch, March 28, 1980

(6) Letter of J. Charles to W. Fink, February 12, 1980

E. Lecoultre M. Hofer

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PME RESEARCH LABORATORY, MARCH 1980

PROJECT TITLE : AGRICULTURAL CHEMICALS

PERIOD COVERED : MARCH 1980

WRITTEN BY : M. SPECK

ROUTINE ANALYSES

Number of tobacco samples analyzed for pesticide residues:

Organochlorines	57
Organophosphorus	57
Dithiocarbamate	56
Ridomil	55

Abnormal high pesticide residue levels were found in Australian leaf tobacco samples: up to 7 ppm Ridomil and 100 ppm DDT in Australian Bright and 1.4 ppm Ridomil and 2.5 ppm Endrin in Burley.

Ridomil residue determinations on samples taken from different plant positions show high residue values for lower plant position, e.g. for Australian Bright Tatti, Mutchilba N.Q.: cutters 0.32 ppm lugs 2.31 ppm, leaf 0.23 ppm and tips 0.13 ppm Ridomil.

NEW ANALYTICAL METHODS

Determination of Aldicarb:

Analytical work for joint experiments suggested by the CORESTA Pesticide Sub-Group in Athens, November 1979, was completed.

Two procedures for the oxidation of Aldicarb to Aldicarb sulfone, oxidation with a) hydrogen peroxide/acetic acid 1 : 1 and b) peracetic acid, were tested. Both methods give identical values for Aldicarb sulfone. The values are, however, somewhat lower than thoseobtained with our own method.

M. Speck

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PME RESEARCH LABORATORY, MARCH 1980

PROJECT TITLE	:	BIOTECHNOLOGY
PERIOD COVERED	:	MARCH 3rd - 31, 1980
WRITTEN BY	:	D. SCHULTHESS

STRIP EXTRACT DENITRATION (1)

Tests are carried out to denitrate extracts of burley strips prepared by an "Ex-Technik" extractor. Our normal denitration procedure did not work with these extracts. Instead of cell growth and denitration only alcohol was produced. A dilution of the concentrated extract (8 % TS) 1:1 with water did not improve the results. But as soon as in a continuous cultivation strip extract is partially replaced by a stem extract, growth resumes and denitration occurs. Thus, we can conclude that in a pure strip extract some essential substances are missing, and their absence is limiting growth. However, these substances are present in stem extracts. Work on their determination continues.

NITRATE ELECTRODE (2)

Tests with the Orion nitrate electrode gave good results. If the nitrate level in tobacco extract is determined by the Technicon procedure and by electrodes, a variation of +/- 3 % can be found. The Orion nitrate electrode can be used to continuously monitor the nitrate content of solutions over a short period of time. Within 15 hours one finds a standard deviation of 0.8 % in a pure nitrate solution and of 1.6 % in a 1:100 diluted tobacco extract. The fact that nitrate electrodes cannot be sterilized gives some problems in continuous measurements. Every 15 hours the entire dilution/ measurement unit has to be cleaned. Otherwise strong bacterial growth and nitrite accumulation occur.

ACID CONSUMPTION (3)

Acid consumption in the Nino process showed to be the same at pH 5.5 as at pH 4.0 (see Monthly Report February 1980, Biotechnology).

STERILIZATION (4)

The lowest temperatures and shortest incubation times needed to assure sterilization were determined. It was found that Ninomass has to be treated at least 60 min. at 80°C (or 10 min. at 90°C), centrifuged extracts at least 30 min. at 80°C (or 10 min. at 90°C) to kill all viable cells.

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TOTAL NITROGEN DETERMINATION (5)

A method for the determination of total nitrogen was developed. The procedure is based on the Kjeldahl method and allows to take into account also the nitrate nitrogen. (6)

MISCELLANEOUS

- 500 g freeze-dryed Ninomass from trial Nino 55 have been prepared and sent to PM USA Flavor Department.
- Media for tissue cultures have been prepared.
- Ten total nitrogen were determined for other groups.

REFERENCES

1. C. Aegerter, Notebook 91204, 1-4
2. J. Berney, Notebook 128, 45-50
3. M.-F. Mangilli, Notebook 791205, 18/19
4. M.-F. Mangilli, Notebook 791205, 23/29
5. A. Hänggi, Notebook 790904, 3-15
6. Büchi Laboratory-Techniques Ltd.
   Nitrogen Information No 7.

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PME RESEARCH LABORATORY, MARCH 1980

PROJECT TITLE : CONTRACT RESEARCH

PERIOD COVERED : MARCH 1980

WRITTEN BY : I. MARCOVITCH

Different projects are presently in progress:

USE OF BABY HAMSTER LUNG CELL CULTURES

The Cryo-preserved HAL-06 culture was used for preliminary studies. The results obtained from a short experiment show that this culture cannot be used for our purposes.

ESTABLISHMENT OF PRIMARY BABY HAMSTER LUNG CULTURES

After the seasonal decrease in breeding, baby hamsters are now again available and primary lung cultures have been started. A pilot study is in progress. These lung cells are presently exposed to reference cigarette smoke and preliminary results will be given in our next report.

USE OF COULTER COUNTER IN ACUTE CYTOTOCIYITY 7 DAY STUDY WITH PAN-L-3 CELLS EXPOSED TO SMOKE OF REFERENCE CIGARETTES 2R1F and SMIM-5

Satisfactory reproducible dose dependent results have been obtained with this equipment. It is therefore intended to use this procedure in future short-term toxicity studies.

NIPUR-1, NIPUR-2, NIPUR-3, NIPUR-4 EXPERIMENTAL CIGARETTES
(Nino-project)

are examined for their cytotoxicity on PAN-L-3 cells. This experiment is in progress and will be reported later.

AMES TEST ON STERILIZED NINO MASS

This study is in progress. Results will be reported in the near future.

I. Marcovitch

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Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE: Nitrate Reduction by Controlled Fermentation.

PERIOD COVERED : March 1st - 21st, 1980

WRITTEN BY : C. Ruf

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1. Trial Nino 55.

During this trial the US RL feedstock was extracted and the extract was treated in three different ways:

1) Production of 125,2 kg of non fermented but concentrated extract.

2) Production of 143 kg of fermented, concentrated extract with Ninomass.

3) Production of 105,3 kg of fermented, concentrated extract without Ninomass.

These three extracts left the pilot plant in sterilized stainless steel drums on March 11th and were sent by air-freight to the RL pilot plant in Richmond where they were used to produce three different sheets.

Analytical data of the extracts are attached (appendice 1).

During trial 3, part of the fermented extract (about 200 lt) accidentally run through the fermenter a second time. This part of the extract received the nutrient additives twice and was subsequently discarded. It was interesting to observe that despite this incident, we were able to continue the fermentation without any problems. This shows that the system is very robust.

A mass balance of this trial is being worked out.

2. Pilot plant.

See monthly report of March 1980 "Pilot Plant Operations" by C. Ruf.

3. Nino/RCB trials.

A meeting took place on March 18 in order to evaluate the analytical results of the Nino/RCB trials 4 and 5. Conclusion were that the samples were not representative and that these trials have to be repeated. (Ref. 1)

See also monthly report March 1980 "Reconstituted Tobacco II" by A. Robbiani.

4. Nitrate reduction of strips.

See monthly report March 1980 "Unit Operations II" by P. Karbacher, N. Luthy.

5. Ninomass.

On March 20th, P. Karbacher and J. Brosy went to Aeromatic in Basle in order to dry some samples of Ninomass in a fluidized bed dryer. (Ref.2).

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6. Miscellaneous.

On March 20th, Messrs. D. Karrer and E. Guazzone from Chemap visited Neuchâtel to discuss the preparation of a scale up study for the Nino process application in Park 500. This study will be based on data from Richmond for one RL line.

PROCESS DEVELOPMENT

C. Ruf

Ref. 1) "Minutes of the meeting of March 18, 1980", F. Moser
Ref. 2) "Compte rendu de l'essai de séchage de Ninomass chez Aéromatic à Bâle", P. Karbacher, March 31, 1980.

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App. 1

Nino 55: Analytical Results

A) Extracts	$N\text{-}NO_3$	RS	$N\text{-}NH_3$	TA	PO_4^{---}	SO_4^{--}	CA^{++}	K^{+}	Mg^{+}	Viscos.	PH	Dens.	Refrac. Index	TS	$N_{tot.}$
	g/l	g/l	g/l	g/l	g/l	g/l	g/l	g/l	g/l	cP		g/l		%	g/l
Non fermented, concentrated extract	15.2	48.2	3.8	21.2	7	11	10	82	6	176	4,6	1.279	1.416	44.6	19.1
Fermented, concentrated extract with Ninomass	0.06	4.5	0.58	6.2	138	36	14	52	3	4864	3,4	1.308	1.418	57.9	11.7
Fermented, concentrated extract without Ninomass	0.02	16.7	0.40	16.9	135	41	17		6	2560	4,3	1.282	1.409	47.0	20.2

B) Tobacco	$N\text{-}NO_3$	RS	$N\text{-}NH_3$	TA	PO_4^{---}	SO_4^{--}	HWS
	%	%	%	%	%	%	%
Feedstock	1.02	4.5	0.2	1.07	0.75	1.05	45.9
Washed feedstock	0.06	0.4	0.02	0.12	0.45	0.55	13.5

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PROJECT TITLE : Pilot Plant Operations

PERIOD COVERED : March 1st - 21st, 1980

WRITTEN BY : C. Ruf

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1. Equipment.

1.1. Extraction:

During the last trial (Nino 55) the electrical heating wire of the extractor broke down for the second time. Another heating system is being studied with the FTR electrical department.

1.2. Evaporation.

The offer from Luwa for a thin film evaporator arrived on March 3rd.

1.3. Control.

The extract flowmeter before the mixing vessel gave us wrong results. It has been replaced and returned to the supplier for control.

2. Laboratory.

2.1. Due to continuous problems with our auto-analyser Technicon, the analyses are now made by the pilot plant lab technician with the equipment of the smoking laboratory. A modification of the dialysis unit of our Technicon will be tried. Besides, Technicon was asked to offer a new auto-analyser line.

2.2. The furniture for the laboratory extension has been installed. The utilities will be connected by the pilot plant personnel.

2.3. A turbidity meter (Eppendorf, type 1100) for measuring optical density of liquid samples from the fermenter is being tried. If it works satisfactorily, it will be used by operators for routine control of fermentation.

3. Personnel.

3.1. The 8th operator started work on March 3rd and has completed the training programme.

3.2. During a meeting on March 14th, the pilot plant organisation was redefined and divided into three activity areas: maintenance, laboratory and operations.

PROCESS DEVELOPMENT

C. Ruf

April 2, 1980

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PROJECT TITLE : Unit Operations I

PERIOD COVERED : March 1st- 26th, 1980

WRITTEN BY : P. Karbacher

Ninomass

A drying trial was carried out at Aeromatic in Basel. The Ninomass was dried batchwise using a fluidized-bed dryer (Ref. 1).

The capacity of this unit is 10 kg/h of Ninomass with a total solids content of 18%. The dried product has a moisture content of 4%. The drying process gives a granulated product of varying particle size. The product is higher in density than spray-dried yeast.

Unfortunately, this unit needs a lot of supervision and cannot run continuously.

A sample of freeze-dried Ninomass was submitted to two different laboratories for comparative amino-acid analyses.

PROCESS DEVELOPMENT

P. Karbacher

P. Karbacher

Reference:

1) Compte rendu de l'essai de séchage de Ninomass chez Aeromatic, S.A. à Bâle, le 20.3.1980.

April 2nd, 1980
KPA/noh

2028627353

Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE : Unit Operations II

PERIOD COVERED : March 1st - 26th, 1980

WRITTEN BY : P. Karbacher, N. Lüthi

NITRATE REDUCTION OF STRIPS

To remain within the agreed renting-time of the Ex-Technik rotocell extractor, trials were carried out in two shifts during two weeks (Ref. 1).

52 trials were made to date using different extraction materials:

Cut-Tobacco	9 trials
RL-Europe Feedstock	6 trials
Short stems	5 trials
Strips	32 trials

A lot of samples are still in the labs for analysis, mainly the cut-tobacco samples.

The table on appendix 1 shows a choice of different results from the trials made on the rented extractor.

RL-Europe Feedstock

NO_3-N reduction is more influenced by the water temperature than by the feedstock to water ratio.

Stems

At 19 kg/h feedrate we notice an increase from 81 % to 96 % in NO_3-N reduction when changing the temperature from 80° C to 90° C.

It is interesting to observe that at 80° C the NO_3-N reduction increases from 81 % to 93 % when doubling the feedrate. This was not observed with RL-Feedstock where the NO_3-N reduction was higher at a smaller feedrate.

Strips

As the table shows, best results were achieved at 80° C and a feedstock to water ratio of 1 : 10.

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When changing this ratio to 1 : 6, the NO_3-N reduction was only 81 %.

By using a water temperature of only 20° C, the NO_3-N reduction was still 75 %.

In conclusion we can say that this machine is suitable for the extraction of different types of feedstock materials. An offer was received from Ex-Technik.

PROCESS DEVELOPMENT

P. Karbacher N. Lüthi

REFERENCES

Ref. 1 : Notebook I, KPA/NIL, pages 1-64.

April 2nd, 1980
KPA/NIL/apf

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Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

APPENDIX I

	Temp. °C	Time min.	Input Feedstock kg/h	Input Water kg/h	NO_3-N Reduction in %
RL-Europe Feedstock	50	40	18	180	86
	50	40	18	108	85
	80	40	36	216	90
	80	40	18	180	89*
	80	40	18	108	97
Stems (lot 7999)	80	40	18	180	81
	80	40	36	360	93
	90	40	18	180	96
	90	40	36	360	96
Strips (MLF Burley Blend)	20	40	18	108	75
	50	40	18	108	78
	80	40	18	108	81
	80	40	18	180	93

*This trial will be repeated as soon as possible.

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PROJECT TITLE : Reconstituted Tobacco

PERIOD COVERED : March 3rd - 28th, 1980

WRITTEN BY : A. Robbiani

MONIQUE / RCB

Production

During this month 40'200 kg of sheet were produced, 2 % more than in February.

Pumps

The new Moyno pumps were ordered and will be delivered at the end of Mai. Panpetrol will install them during the summer shut down of the Monique plant. The vacation period is scheduled from July 14th - August 1st.

Refiner

The new refiner gaskets recommended by Sprout Waldron (Ref. 1) were installed.

FTR Cutter

The drawings of this device, which should replace the existing COMAS slitter cutter, were finished and given to the workshop to calculate a price estimate.

After Dryer

On March 24th new heating elements were installed. They should resist to higher temperatures.

Capacity Increase

A study is under way to increase the production capacity of the Monique/RCB installation.

One possibility could be to rise the air temperature of the Sandvik dryer by increasing the thermo oil temperature.

An engineer from Konuskessel, manufacturers of the thermo oil boiler visited Onnens on March 24th.

His advices were very helpful and are now being followed up by the engineering department.

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APPLICATION OF NINO-PRODUCTS IN MONIQUE/RCB

Trial NINO/RCB 4 and 5

The objectives of these trials were described in the December monthly report (Ref. 2).

The analytical results of these trials were received (Ref. 3).

A meeting took place on March 18th to discuss these results

The discussion led to the conclusion that these trials will have to be repeated.

QC ONNENS

Lab Installation

The furniture for the lab was ordered. Meetings were held jointly with the architects to determine details of the building modifications.

First discussions took place to establish the sampling plan for the ETNA start-up period.

A. Robbiani

REFERENCES

1 Monthly report, September 1979, Reconstituted Tobacco, H. Friedrich.

2 Monthly report, December 1979, Reconstituted Tobacco II, A. Robbiani.

3 Note from Miss L. Joseph to A. Robbiani from March 4th, 1980.

April 2nd, 1980
ARO/apf

2028627358

Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE : APL - PME Cigarette Data Bank

PERIOD COVERED : March 3rd - 24th, 1980

WRITTEN BY : R. Toïmil

APL

- After a visit to the ERZ (Elektronische Rechenzentrum, PTT) on March 4th, the different statistical programmes were optimized. The improvements will allow more flexibility and a gain of one tenth of the work space.

- An instruction manual for the statistical programmes including several examples is being prepared.

PME Cigarette Data Bank

The different outputs were submitted to the EDP department on March 20th, 1980. These outputs will allow the utilization of the files on screens, with printed lists or with APL.

Toïmil

R. Toïmil

Reference: (1) Monthly report from January 1980, written by R. Toïmil.

March 25, 1980
RAT/noh

2020627359

Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE	:	CIGARETTE DEVELOPMENT TECHNICAL REPORT
PERIOD COVERED	:	March 1st - March 31st 1980
WRITTEN BY	:	P. NAGEL

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363 DELAWARE Swiss Tar : 3.0 / Format : 25/80/7.95

The first prototypes produced for orientation purposes partially met the objectives.
The smoke yield objective is achieved.
Four prototypes have 3 mg Tar.
The weakest point is the low puff number which is presently 6 puffs/cig. (minimum objective : 7.0 puffs/cig.)
We are awaiting the taste evaluation before changing the cigarette construction.

271 COLORADO Swiss Tar : 3.0 / Format : 25/84/7.95

As the production is overloaded the trial programme mentioned in the monthly report of February was not carried out. It will be done at the beginning of April.

278 EVEREST

The results of the prototypes produced with the triple filter ex Baumgartner are negative with regard to taste. (See monthly report of February 1980).
New trials are under way : some with a new triple filter ex Baumgartner and others with a triple filter having the following construction :

Plug 1 : 2.5/48'000 Y, format : 80/7.80 ex FTR

Plug 2 : 5.0/40'000 Y black, 68 % of Meerschaum
32 % of Carbon Pilote 11184, FU-POV 150 K,
format : 80/7.80 ex Baumgartner

Plug 3 : SPA (paper / acetate), format : 80/7.80 ex Job

This filter is assembled at FTR with a plug wrap FU-POV 40 L, always with the same configuration (5/10/5).
Cigarettes will be produced following the specification of prototype 201.

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Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

360 MIAMI Swiss Tar : 14.0

We have produced six prototypes for the above mentioned project.
Prototype No 1 was chosen by Panel A.
On this basis flavour trials will be carried out.

Characteristics of the prototype

Version No		1 P
Blend		Lot No 844 (American blend)
Format		20/79.4/7.975
Cigarette paper		WP 60
Filter		3.4/46'000 I (FU-POV 40 L)
Tipping		Z4/80
Total alkaloids	%	1.62
Swiss Tar	mg/cig.	12.8
SN	mg/cig.	0.92
Puff count	n	8.9
CO	mg/cig.	14.5
NO	mg/cig.	0.29
Dilution	%	12

P. Nagel

P. Nagel

2026627361

09/04/1980/PHN/cap

Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE	:	CIGARETTE DEVELOPMENT TECHNICAL REPORT
PERIOD COVERED	:	March 3rd - March 25th 1980
WRITTEN BY	:	J.-H. DU BOIS

S W E D E N

354 INGEMAR / GAMMA

Product having a tar content of 6 to 8 mg/cig., an SN as high as possible, CO content below 10 mg/cig. and a puff count of 8 puffs/cig. A 25 mm filter and 29 mm tipping are requested.

Prototypes 11 and 12, which are a repetition of prototypes 5 and 9, with however the GAMMA 83 E flavour at 70 % have been produced and analysed.
The DPM found is respectively 6.0 mg/cig. and 7.9 mg/cig.
The taste evaluation results are not yet known.

355 GOSTA I

A product delivering 1 mg tar or less, SN and CO values should be commensuratly low, but are not specified. Same format as BOND LTN. Cork tipping. American blended type of taste.

Trials will be made during the second half of April with dual paper/acetate filters having a higher efficiency for an RTD equivalent to a 3.4/46'000 I acetate filter.
A recent information indicates that Intertaba is able to produce dual filters in a moderate size.
Should this be true, trials will be initiated earlier than planned.

361 GOSTA II

An American blend GAMMA type product delivering 2 and 4 mg tar. Moderate size.

The two prototypes with 20 % of ES and 7 % of FC ETNA

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Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

were produced, but are not accepted for taste (No 31 and 32). They gave however DPM values of respectively 4.1 and 3.3 mg/cig.
Prototypes have now been ordered with a blend having 27 % of Burley ETNA and the other 17 % of Burley ETNA + 10 % of ES. The analytical results and taste evaluation are not yet available.

U N I T E D K I N G D O M

208 TENNIS — UK tar less than 16 mg/cig.
Format : 7.975/20/85

The present situation is that an M 7 prototype will be developed. This prototype is basically the M 4 prototype smoothed out.
Some tobacco grades had to be ordered and the blend preparation is expected for week 14 or 15.

290 HILTON — UK tar less than 10 mg/cig.

The preparation of the product test is made under high pressure and a tight timing for the following reasons : The competitive brands were only received middle of week 13. The availability of the cigarette making was practically zero. The prototypes had to be repeated because the analytical values were not within the objectives.
The product test cigarette will however be dispatched at the beginning of week 14.

F R A N C E

362 WATSON

A product test between prototypes 71 M, 73 D and CAMEL MILD is being prepared under high pressure. The second part against PETER STUYVESANT EXTRA MILD will be prepared after the Easter holidays.

2028627363

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I T A L Y

MERCEDES KS

A trial has been ordered with a cigarette in which the Silicagel has been replaced by Meerschaum, this at the request of Mr. A.G. Buzzi. Analytical results and taste evaluation are not yet available.

J.-H. Du Bois

26/03/1980/JHD/cap

2026627364

Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PME PRODUCT DEVELOPMENT, March 1980

PROJECT TITLE : PRODUCT DEVELOPMENT LABORATORY
PERIOD COVERED : February 21st - March 20th 1980
WRITTEN BY : S. BEGUIN

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1) CIGARETTE PRODUCED IN THE MANUFACTURING DEPARTMENT

a) Total quantity : 782,000
b) Number of prototypes : 45

2) TOBACCO BLEND TRIALS IN THE PRIMARY DEPARTMENT

a) 11 x 1,000 kg (unflavoured)

3) FILTER RODS PRODUCED IN THE FILTER MAKING DEPARTMENT

a) Total quantity : 80,000
b) Number of prototypes : 4

4) PACKS (20 cig.) PRODUCED IN THE PACKING DEPARTMENT

a) Total quantity : 10,500
b) Number of projects : 4

5) PRODUCT TESTS PREPARED : 3

S. Béguin

SEB / cap

2028627365

Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE : Flavor Development

PERIOD COVERED : February 25th - March 21st, 1980

WRITTEN BY : J.P. Fatton

Foil mentholating

Concise instructions for use as well as a mentholation table which includes the brands to be mentholated, the right amount and the code of the corresponding solution have been written. A table of recipes to allow the kitchen to use a maximum of full tins of natural menthol was also established.

The bobbins to be mentholated for Runner Menthol and Armada Menthol for Weltab and PM Holland have arrived.

Lolita

Following PM Germany's wish, a "fruity-cake" flavor was developed for the following cigarettes: Lark K13, Lolita 10mg with Pilot charcoal and Lolita 10mg with Calgon charcoal.

Of the 8 flavors proposed to the experts, 4 were chosen, improved and blended. This gave the 5 flavors that were submitted in Munich. Three of these 5 flavors were refused by the smoking panel in Lausanne on March 20, 1980.

The different suppliers of the flavors ingredients were contacted. Only two of the companies, Borgwaldt and International Flavors and Fragrances, gave an answer and will send the merchandise as soon as possible.

Barbara

Two flavors were developed in the laboratory and were injected in cigarettes of the prototype Miami 1P. These were smoked in Lausanne on March 20, 1980, and found to be in the right taste direction: they will be smoked in Munich on March 21, 1980.

J.P. Fatton

March 25, 1980
JPF/noh

2020627366

Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE : Tobacco Analysis

PERIOD COVERED : February 29th - March 24th, 1980

WRITTEN BY : L. Joseph

TOBACCO LOT ANALYSES

1. Special trials

1.1 Low nitrate samples (1)

The results of the cultivation trials made on Burley on Italy are available. These trials consisted in different levels of nitrogen fertilization. The NO_3-N levels of different grades of these tobaccos are abnormally low, as were those of the last year (only 1 sample had a NO_3-N level greater than 0.2%).

1.2 Pakistani tobaccos (2)

The analyses are under way.

1.3 Partially contaminated lot (No. 9084) (3)

No significative difference was found in the smoke analyses between the control and the contaminated samples (just a little lower CO and aldehydes delivery).

2. Routine tobacco lot analyses

2.1 Introduction of inputs on EDP

Twenty four lots were introduced this month.

2.2 Lots under evaluation

Twenty eight lots.

2.3 Lots available, but not yet analysed

Twenty lots.

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ASSISTANCE TO OTHER PROJECTS

1. Spotless (4)

Cigarettes have been made with five samples of untreated tobaccos (ØS-B-FC; ØS-B-BU; ØS-B-OR; ØS-A-MD; ØS-A-CH). The analyses are under way.

2. RCB Monique

Trials Nino No. 4 and No. 5 (5)

Due to the bad combustibility of the cigarettes, the smoke analyses could not be done. We have found surprising analytical results of the sheet of trial Nino RCB No. 4.

- high SiO2 level (3.3%)
- presence of propylene glycol (0.25%)
- high NO_3-N level (0.18%)

This trial will be repeated.

L. Joseph

L Joseph

References:

1) Tobacco analysis monthly report of April 1979.
2) Letter from Mr. C. Jeanneret to L. Joseph, dated February 1, 1980.
3) Letter from Mr. E. Lecoultre to L. Joseph, dated December 17, 1979.
4) Spotless monthly report, January 1980.
5) Letter from L. Joseph to Mr. A. Robbiani, dated March 4, 1980.

March 26, 1980
LIJ/noh

2028527368

Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE	:	Cigarette and Smoke Analysis
Period Covered	:	March 1 - 28, 1980
Report Written by	:	F. Senehi
Report Approved by	:	F. Lopes

ANALYTICAL SMOKING

- European Brands - Historic Data

Tables containing information on tar, nicotine, CO and NO numbers on a quarterly basis for all PME and some competitive brands sold in the following European countries and listed in the PME Cigarette Information Report were issued (ref. 1) :

AUSTRIA	ITALY
BELGIUM	NETHERLANDS
DENMARK	NORWAY
FINLAND	SPAIN
FRANCE	SWEDEN
UNITED KINGDOM	

- New Diluted Marlboro 79/F and 84/F Produced in Bologna for Italy

For this second production, the dilution on both products was determined for each production day from February 11 to February 29, 1980 (ref. 2).

Brand	% Dilution Found		% Dilution Specified
	$\bar{x}$	s	
MLF	11.1	0.6	10
MLK	10.1	1.0	10

$\bar{x}$ = Average of the whole production
s = Standard deviation

- Product Reports

Product reports were written on the following new or modified brands :

Brand	Manufacturer	Country of Sale
Craven "A" Légère 84/F (new brand)	Carreras-Rothmans	France
Lido Extra Mild 79/F (new brand)	Italian Monopoly	Italy
Golden 5 Extra 79/F (new brand)	Imported by Denner	Switzerland

2028627369

Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE : Cigarette and Smoke Analysis

Brand	Manufacturer	Country of Sale
Match Filter Soft 85/F (new brand)	Burrus	Switzerland
John Player Special K.S. 84/F (new pack, new format)	Imperial Tobacco	United Kingdom
Rothmans K.S. Special Mild 84/F (new brand)	Carreras-Rothmans	United Kingdom

QC FINISHED PRODUCTS

F. Senehi

REFERENCES

1) Letter dd. 03-07-80 from F. Senehi to Ms. S. Wiener

2) Letter dd. 03-14-80 from F. Senehi to Mr. A. Trento

04-14-80/mos

2023627370

Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE	:	Additives and Analytical Services
Period Covered	:	February 26 - March 24, 1980
Report Written by	:	A. Widmer
Report Approved by	:	F. Lopes

ORGANISATION

- Incoming control of additives - Ref.: 1

  A report has been established on the basis of the shipments of additives during the year 1979. In order to improve the efficiency of the incoming control and to get more time to perform the analysis, the following main points have been suggested :

  - The samples have to be taken as soon as the shipment has arrived in Onnens according to the sampling plan "special level S-3" (MIL - STD - 105 D), in function of the number of unities.

  - The incoming control has to be splitted into a preliminary control and a quality control. The preliminary control (visual and olfactive tests, density, refraction f.e.) has to be effected in Onnens on the whole number of samples. The quality control in Serrières has to be carried out on one sample per shipment, provided that no irregularities have been detected during the preliminary tests.

TRIALS WITH NEW SUPPLIERS OF FILTER ADDITIVES

- Activated charcoal (PICA SA, Levallois (France), "Pilot 11184" / yellow sheet 5407, 90 kg) - Ref.: 2

  BRD Test cigarettes with 70 % charcoal (normal PICA and "Pilot 11184") have been produced.

  Smoke analysis : no significant difference could be observed.
  Panel A : The cigarette with 70 % normal PICA has been considered unclean and flat.
  The cigarette with 70 % "Pilot 11184" is clean but too aggressive.

  Upon recommendation of Panel A the department Product development is working with the same charcoal for further filter developments.

TRIALS WITH NEW SUPPLIERS OF GLUES

- Glue for tipping paper (LAESSER AG, Erlinsbach, "1516 G 1" yellow sheet 5535, 1 kg)

  The glue is not more adhesive than the standard. Further trials are not foreseen.

- Glue for tipping paper (LAESSER AG, Erlinsbach, "1516 G 2" yellow sheet 5534, 1 kg)
  The glue is not more adhesive than the standard. Further trials are not foreseen.

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Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

- Filter glue (FULLER GmbH, "Lunabond C 7518"), PMG Munich - Ref.: 3

  The glue gives considerable advantages on the machine. Panel A found a significant difference between the test cigarettes (BSL - IT) and the standard. Not accepted.

PRODUCT QUALITY

- Humectants in "Peter Stuyversant Extra Mild" - Ref.: 4

  In the cigarettes of the Swiss market 1.73 % glycerine has been found, in the cigarettes of the French market 1.78 % glycerine has been found.

- Humectants in "Ernte 23" - Ref.: 5

  1.58 % diethylene glycol has been found.

SERVICES FOR OTHER GROUPS

- Foil mentholating
  32 Analysis of menthol in cigarettes
- Analysis for Mr. M. Regard
  pH, calcium, magnesium, iron and $KMnO_4$ consumption in water samples (4 samples)

REFERENCES

Ref.: 1 : Report A. Widmer, dd. 19.03.1980

Ref.: 2 : Monthly report A. Widmer, August 1979

Ref.: 3 : Letter from A. Widmer to Mr. B.W. Lutzig, dd. 07.03.1980

Ref.: 4 : Letter from A. Widmer to Mr. R. Pantet, dd. 04.03.1980

Ref.: 5 : Letter from A. Widmer to Mr. M. Häusermann, dd. 14.03.1980

2023527372

Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE : Material Development

Period Covered : March 1st - March 31st 1980
Report Written By : P. Balliger
Report Approved By : F. Lopes

POROUS PLUG WRAP

- SPP W 30 K 25	Bollore
- HF 40 K 28 Variante 4/2	Glatz
- FY HP 40K	Wattens
- PPW 50K	Dexter

These porous plug wraps should correspond to the basic quality of Schoeller & Hoesch's FU POV 40 L.
Cigarettes MLF - CH (full diluted) will be produced using these above mentioned qualities for smoke yield determination and taste evaluation.

FILTRATION MATERIAL

Up to now, only Eastman with their tow 3,4/46 000 I is qualified as supplier for pan-European diluted Marlboro.
In order to overcome this unfavourable situation, we made the following trials :

Rhodia

- 3,0/ 43 000 Y	
- 3,4/ 36 000 I SK	balle No 148 446
- 3,4/ 38 000 I SK	balle No 148 444
- 3,4/ 46 000 I	balle No 037 790
- 3,4/ 46 000 I	balle No 037 983

Based on satisfactory analytical results, cigarettes produced in FTR with these materials were submitted to smoking panel A for taste evaluation.

Except 3,4/ 46 000 I No 037 790 all qualities were refused for taste reasons.
The final decision will depend on the outcome of a smoking panel D test.

Amcel

- 3,3/ 44 000 Y		Celanese USA
- 3,4/ 46 000 I	balle No 97 242	Celanese USA
- 3,4/ 46 000 I	balle No 82 235	Amcel Belgium

Amcel was previously qualified for non-diluted pan-European Marlboro and used by PMG - Munich.
Several trials have already been conducted on diluted Marlboro with negative taste results.

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Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

In the presence of an Amcel representative, we have lately made new trials with the above mentioned material.
A comparison will be made between a USA and a Belgian-made 3,4/ 46 000 I material.

Filters were also produced with 3,3/ 44 000 Y which is a standard quality used by PM Richmond on the diluted Marlboro version.
MLF - CH made with these tows will soon be submitted to smoking panels for taste evaluation.

TECHNICAL SHEET

Cigarette paper

No 30 0028	NSP 200	variante 1	Glatz
No 30 0029	NSP 200	variante 2	Glatz
No 30 0030	NSP 200	variante 3	Glatz
No 30 0031	NSP 200	variante 4	Glatz
No 30 0032	NSP 200	variante 5	Glatz
No 30 0033	NSP 200	variante 6	Glatz
No 30 0034	E 30023		Wattens

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Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE : SPECIFICATIONS AND PROCESS ASSURANCE

Period Covered : 1.3. - 26.3.1980
Report Written By : C. Flury + T. Bel
Report Approved By: J.B. Boder

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1. Specifications Fabriques de Tabac Réunies SA

- Following the use of mentholated foil and a subsequent taste test, the same blend 54 BSD Bond LTN will be used for the cigarettes Bond LTN and BSC Bond Menthol.

- The cigarettes MIF Milla and CHF Champion have been modified with regard to the filter length (20 instead of 18 mm) and the tipping paper (48 instead of 44 mm). The tobacco weight has been reduced proportionally.

- The filter and cigarette making specs for the Marlboro Filter and Marlboro King Size MLF MLK cigarettes, manufactured by FTR under contract for P. Morris Holland, have been modified from non-diluted to the semi-diluted versions.

- The packing spec MAA 057 Duty free sales in Great Britain, via Allders, have been re-issued.

- A new product version MAA 067 is manufactured for sale to Air Algérie.

- The packing specs for ALF Arlette have been modified. The last packing group AMF Arbor 223/Focke & Pfuhl has been removed and ALF are now packed on a AMF Arbor 34/G.D. Pack OW group. The materials have changed consequently.

- A new Product version MLY 022 Marlboro Lights is manufactured for sale in Austria.

2. Specifications Intertaba S.p.A. Zola Predosa

- Two new filter making specs have been distributed for the semi-porous and porous Marlboro 108 mm filters, to be sold to PM Holland.

3. Specifications Ph. Morris Holland

- The filter making specs (white semi-porous 108, 120 and 100 mm) are now manufactured with filter paper FU-POV 40 L replacing 24 K.

- All cigarette making specs have been re-issued in an updated form.

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- PM Holland do no longer use non-porous filters. For non-diluted cigarettes, such as NPK North Pole King Size, ROK Roy, and NLF North Pole Filter, the semi-porous filters used are covered with the standard non-perforated tipping paper.

- The reduction of the RTD from 115 to 105 mm WG on NLF North Pole Filter has been approved. The RTD reductions provisionally specified for ROK Roy and MPH Ph. Morris 100s will have to be reviewed.

- The AccuRay equipment has been removed from all 84 mm makers of Eindhoven and transferred to the Bergen OZ production site.

4. Specifications Ph. Morris Germany

- In addition to the standard Italian Marlboro King Size MLK 10, Munich will produce MLK 30 for sale in Italy in the size 63 + 21 = 84 mm, on one cigarette maker already converted to this garniture size (MLK-DB). RTD of 105 mm and dilution of 7 % are expected to remain unchanged.

- Munich has started the production of the diluted version of the German Marlboro King Size MLK 12, following the product development phase. The cigarette is manufactured with a new blend, a porous filter (24 K paper), a zone perforated tipping paper Z3/70, an RTD of 105 mm WG and a dilution of 15 %.

- The original Parliament PLL 01 tipping paper, purchased with PM USA previously, has been replaced by a 64 mm tipping paper supplied by Tann.

- The filter and cigarette making cigarettes for PMS Ph. Morris Super Lights, as well as the cigarette making specs for LAG 01 Lark, have been corrected (RTDs) according to product development's recommendations (new products).

- The complete specs sets for EFH Efes 100s and TKH Topkapi 100s, manufactured under license of the Turkish Monopoly, have been withdrawn. The contact between the two firms will expire at the end of April, 1980.

5. Specifications WELTAB SA Bruxelles

- The cigarette making spec MLF 22, for sale in Italy, has been modified from the non-diluted to the diluted version.

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- A new packing version Merit MER 052, in HL pack, for the Dutch market, has been produced.

- The packing specs for
  - MLK 152 (MLB 152), in display carton, sale in GB,
  - MER 012 Merit, in 25s soft pack, for sale in NL
  - MLK 152, Molins packer,

  have been withdrawn.

6. Specifications Ph. Morris Great Britain

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7. Specifications Licensees

- Finland: The re-engineered BEO Belmont Extra Mild cigarette is manufactured with a porous filter, Hauni dilution on a 27 mm wide tipping paper, and a dilution of the cigarette of 24 % (previously 15 %).

- The cigarette length of all Finnish brands has been reduced (in 1974) from 20 + 60 to 20 + 59,4 = 79,4 mm.

- Complete new specs have been established for ATO, Finland, for the two brands CEK Chesterfield and PMK Ph. Morris King Size, both 84 mm plain cigarettes in soft packs.

- Complete sets of specs have been prepared for the L & M products manufactured at Suomen Tupakka OY, Helsinki, Finland, i.e.LMB L & M HL pack for sale in Finland and Norway, and LMC L & M soft pack, for sale in Finland, have been prepared.

- Complete manufacturing specifications are available for Manchester Tobacco Company, for the manufacture of their L & M products, i.e. CEG Chesterfield King Size Filter Box, for sale in Great Britain, Ireland, and Danemark, and LMG L & M King Box, for sale in Great Britain and Ireland.

- Italy: The MAA Ambassador specs for Bologna have been modified and foresee the addition of 3,12 % Esther as in Rovereto.
  The MLF Marlboro specs for Bologna have been modified, since 3,33 % Esther will be added as from May, 1980.

8. Material Specifications

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9. PME Standard Recipes

- The RUM-AC recipe has been modified with regard to the application rate of solution to the Dutch RUM Runner Menthol blend.

- Three new recipes have been established for Chesterfield and L & M products.

10. Specifications on EDP

- Authorization has been received for a detailed study of rentability.

11. Process Assurance

11. 1. Objectives of Process Assurance

Expressed in a condensed way, the objectives of "Process Assurance" are the following:

- Create a more detailed description of the processes applied.
- Improve the concept of the specifications so as to obtain a better "protection" of the product.
- Define methods and procedures which allow to verify the respect of the spedifications.
- Try to standardize identical products manufactured in different production centers, and be able to justify each deviation.

The different subjects presently studied or planned to be handled are listed below.

11. 2. AccuRay

- Comparison between the affiliates of the different systems used to check the installation.
- Review of the document "Esplanations to the AccuRay limits".
- Define a common system for the check of the ArruRay system, as far as possible.
- Determine an identical method for the calculation of the AccuRay limits mentioned in the specifications.

11. 3. Moistures

Establishment of a comparative table of the moistures presently valid in all production centers (moistures of cigarettes after packing and after cigarette maker).

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11. 4. Non-Tobacco Material Weight

A common procedure of calculation for the determination of the weights of glues and materials used in the filter and cigarette making departments has to be laid down.

11. 5. Transport Jets (Filter Making)

A situation report will be prepared once all information and complete documentation will have been collected.

11. 6. Filter and Cigarette Diameters

Comparative table of the principal brands.

11. 7. RTDs and Dilution

Comparative table.

11. 8. Foil mentholating

Following the numerous questions from PMH and PMG, the actual method, prepared by FTR, will have to be completed.

11. 9. Kitchen

A study of the methods applied in the affiliates will be made and will cover the points:
Check of the standard recipes / Kitchen recipes / Ingredients / Solutions and their application.

11. 10. Primary

A first study concerning the present situation (equipment and processes) in FTR, WELTAB, and PMG Munich, has to be carried out.
Following the construction of the new processing departments in PMH Bergen op Zoom and PMG Berlin, we will be able to decide in which sense the specifications and checking methods will have to be modified and improved.

11. 11. Proctor & Schwartz

To answer to a request of PMH, a comparison of the systems applied in FTR and PMG Munich has been prepared.

T. Bel C. Flury

2028622379

Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE : Physical Testing Methods

Period Covered : March 1 - 31, 1980
Report Written by : T. Piko
Report Approved by : F. Lopes

Automation of the Smoke Laboratory

We received the results of the study carried out by "RCB Electronic" on the automation of the smoke laboratory. The main objective of this study is to evaluate the possibility of connection of the apparatuses used for cigarette control to a central computer. Further internal work is still to be done before trial evaluation and decision.

Cigarette Compressibility

An order for ten new instruments for the determination of cigarette compressibility was placed with Huguenin. Delivery in approximatly three months.

Pressure Drop and Dilution Instrument ex Richmond

We received two PDI/DDI instruments from Richmond.
In the near future we will replace the actual PME apparatuses used in our smoke laboratory. We will then be able to give in our C.I.R. values comparable to the Richmonds ones.

Miscellaneaous

Four PME pressure drop and dilution instruments were dispatched to Philip Morris Holland.

QC - METHODS

T. Piko

2026627380

Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

PROJECT TITLE	: PATENTS
PERIOD COVERED	: March 1980
WRITTEN BY	: J.C. Mandiratta

NINO-CANDIDA - UNITED STATES APPLICATION

The draft of this application has been revised by the inventors and sent back to the Patent Office in Richmond and to Watson, Leavenworth, Kelton & Taggart, New York. The application is being redrafted and will be sent back to us for reviewing prior to filing in the United States. The question of filing this application in other countries via the European Patent Office or the National Patent Offices will be decided in the next United States Foreign Patent Subcommittee meeting in early May.

RENEWAL FEES

The renewal fees have been paid for the undermentioned patents and patent applications:

Austria	334 805	Smokeable product with Meerschaum particles
Luxemburg	68 080	" " " "
Luxemburg	68 081	" " " "
Luxemburg	77 272	Process of denitrating tobacco (Anaerobic process)
Switzerland	3426/79	Same as above
The Netherlands	780 404	Same as above
Belgium	866 445	Same as above
France	7 813 771	Same as above
Australia	34 921	Same as above
West Germany	P 2 816 427.4	Process of denitrating tobacco (Anaerobic process; Enterobacter)
Switzerland	4916/78	Same as above
France	7 814 102	Same as above

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Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000

NEW PATENTS ISSUED

The following patents have been issued this month:

West Germany	PS 2 210 255	Method for processing low wood content non tobacco plant material into tobacco substitute
West Germany	AS 2 307 974	Process for the manufacture of regenerated tobacco
Luxemburg	80 049	Box for smoking articles in the form of cigarettes or the like

VISIT

Dr. Hach visited us on 31st March 1980 regarding the patent situation for Meerschaum as sorbent for cigarette filters.

PATENT DOCUMENTATION

Todate, 3600 documents are on the STAIRS system for patent documentation.

J.C. Mandiratta

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Source: https://www.industrydocuments.ucsf.edu/docs/llnm0000